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Sut	Substitute for form 1449A/B/PTO			Complete if Known		
000		, , , ,		Application Number	10/685,258	
11	NFORMATIC	N DI	SCLOSURE	Filing Date	October 14, 2003	
S	TATEMENT	BY A	APPLICANT	First Named Inventor	Antony M. Carr	
				Art Unit	1642	
	(Use as many	sheets as	necessary)	Examiner Name	Not Yet Assigned	
Sheet	1	of	4	Attorney Docket Number	27866/34132B	

	U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ² (If known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
PR	A1	5,912,143	12/1996	Bandman et al.		

<u> </u>		FOREIG	ON PATENT D	OCUMENTS		
Examiner Initials*	Cite No.	Foreign Patent Document Country Code ³ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	™
PR	BI	WO 89/03891 .				
PR	B2	WO 90/13667	•			

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		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Τ²
	CT .	Ahn et al., Nature Genetics 3 (4): 283-291, 1993	
PR	C2	Al-Khodairy, et al., "DNA repair mutants defining G₂ checkpoint pathways in Schizosaccharomyces pombe," EMBO, J., 11:1343-1350 (1992)	
PR	СЗ	Al-Khodairy, et al., "Identification and Characterization of New Elements Involved in Checkpoint and Feedback Controls in Fission Yeast," Mol. Biol. Cell, 5:147-160 (1994)	
PR	C 4	Allen, et al., "The SAD/RAD53 protein kinase control multiple checkpoints and DNA damage-induced transcription in yeast," Genes Dev., 8:2401-2415 (1994)	
PR	C5	Barbet, et al. "Versatile shuttle vectors and genomic libraries for use with Schizosaccharomyces pombe," Gene, 114:59-66 (1992)	
PR	C6	Beamish, et al., "Radiosensitivity in ataxia-telangiectasia: anomalies in radiation-induced cell cycle delay," Int. J. Radiant. Biol., 65:175-184 (1994)	
PR	C7	Bowie et al. (Science, 1990, 257: 1306-1310)	
PR	C8	Burgess et al. (J of Cell Bio. 111: 2129-2138, 1990)	
PR	C9	Carr, et al., "The cellular responses to DNA damage," Trends in Cell Biol. 5:32-40 (1995)	
	010	Cawthon et al. Genomics 9 (3): 446-460, 1991:	

Examiner Signature	/Peter Reddig/	Date Considered	

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Sheet	2	of	4	Attorney Docket Number	27866/34132B	

PR	C11	Chein, et al., "The two-hybrid system: A method to identify and clone genes for proteins that interact with a protein of interest," Proc.Nat'l.Acad.Sci.(USA) 88:9578-9582 (1991)
PR	C12	Cimprich, "cDNA cloning and gene mapping of a candidate human cell cycle checkpoint gene," Proc. Natl. Acad. Sci. U.S.A., vol. 93, pp. 2850-2855(1996)
PR	C13	Deng, et al., "Mice Lacking p21 ^{CIPI/WAFI} Undergo Normal Development, but Are Defective in G1 Checkpoint Control," Cell, 62:675-684 (1995)
PR	C14	Drwinga, et al., "NIGMS Human/Rodent Somatic Cell Hybrid Mapping Panels 1 and 2," Genomics 16:311-314 (1993)
PR	C15	El-Deiry, et al., "WAF1, a Potential Mediator of p53 Tumor Suppression," Cell, 75:817-812 (1993)
PR	C16	Enoch, et al., "Fission yeast genes involved in coupling mitosis to completion of DNA replication," Genes Dev., 6:2035-1046 (1992)
PR	C17	Geysen, et al., "A Priori Delineation of a Peptide which Mimics a Discontinuous Antigenic Determinant," Mol.Immunol.23:709-715 (1986)
PR	C18	Greenwell, et al., "TEL1, a Gene Involved in Controlling Telomere Length in S. cerevisiae, Is Homologous to the Human Ataxia Telangiectasia Gene," Cell, 82:823-829 (1995)
PR	C19	Grimm, et al., "Genetic engineering of Schizosaccharomyces pombe: A system for gene disruption and replacement using the ura4 gene as a selectable marker," Mol. Gen. Genet., 215:81-86 (1988)
PR	C20	Groudine et al. (T91040), GENESEQ Database, National Center for Biotechnology Information, National Library of Medicine, Bethesda, Maryland.
PR	C21	Groudine et al. (X01275) GENESEQ Database, National Center for Biotechnology Information, National Library of Medicine, Bethesda, Maryland.
PR	C22	Gutz, et al., In Handbook of Genetics, King, R.C., Ed., Plenum Press, New York, Vol. 1 pp. 395-446 (1974)
PR	C23	Hari, et al., "The mei-41 Gene of D. melanogaster Is a Structural and Functional Homolog of the Human Ataxia Telangiectasia Gene," Cell, 82:815-821 (1995)
	C24	Harris et al., J. of the Am Society of Nephrology 6. 1125-1133, 1995.
PR	C25	Harper, et al., "The p21 Cdk-Interacting Protein Cip1 Is a Potent Inhibitor of G1 Cyclin-Dependent Kinases," Cell, 75:805-816 (1993)
PR	C26	Hartwell, et al., "Cell Cycle Control and Cancer," Science, 266:1821-1828 (1994)
PR	C27	Hiles, et al., "Phosphatidylinositol 3-Kinase: Structure and Expression of the 110 kd Catalytic Subunit," Cell, 70:419-429 (1992)

Examiner	/	Date	ĺ
Signature	/Peter Reddig/	Considered	1

PTO/SB/08a/b (08-03)
Approved for use through 07/31/2008, OMB 0851-0031
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	(Use as many s	heets as	necessary)	Examiner Name	Not Yet Assigned	
Sheet	3	of	4 .	Attorney Docket Number	27866/34132B	

PR	C28	Hillier et al. (R09128), Genbank Sequence I Information, National Library of Medicine, 1 1995.	Database, National Center for Bethesda, Maryland, public	or Biotechnology ly available April 5,				
PR	C29		Jimenez, et al., "The rad3 ⁺ gene of Schizosaccharomyces pombe is involved in multiple checkpoint functions and in DNA repair," Proc.Nat'l.Acad.Sci. (USA) 89:4952-4956 (1992)					
PR C30 Kato, et al., "An essential gene, ESR1, is required for mitotic cell growth, DNA repair an meiotic recombination in Saccharomyces cerevisiae," Nucl. Acids. Res., 22:3104-3112 (19)								
	031	Lamb, et al., "Inhibition of DNA replication acting factor," Int. J. Radiat. Biol., 56:125-130		diated by a trans-				
PR	C32	Lazar et al. (Molecular and Cellular Biology						
PR	C33		Leach, et al., "Regional Localization of 188 Sequence Tagged Sites on a Somatic Cell Hybrid Mapping Panel for Human Chromosome 3," Genomics, 24:549-556 (1994)					
PR	C34	Maundrell, K., "nmt1 of Fission Yeast," J.Biol. Chem., 265:10857-10864 (1990)						
PR-	C35	Morrow, et al., "TEL1, an S. cervisiae Homolog of the Human Gene Mutated in Ataxia Talangiectasia, Is Functionally Related to the Yeast Checkpoint Gene MEC1," Cell, 82:831-840 (1995)						
PR	C36	Murray, et al., "Cloning and characterization of the S.pombe rad15 gene, a homologue to the S.cerevisiae RAD3 and human ERCC2 genes," Nucl. Acids Res., 20:2673-2678 (1992)						
PR	C37	Nasim, et al., "Genetic Control of Radiation Genetics, 79:573-582 (1975)	Sensitivity in Schizosaccha	aromyces Pombe,				
PR	C38	Painter, et al., "Radiosensitivity in ataxia-tel Proc.Nat'l.Acad.Sci.(USA) 77:7315-7317 (1		tion,"				
	639	Reiger et al. (Gloscary of Genetics and Cyte Springer-Verlay, Berlin, 1978)	egeneties, Classical and Mo	lecular, 4th Ed.,				
PR	C40	Rowley, et al., "Checkpoint controls in Schiz 11:1335-1342 (1992)	zosaccharomyces pombe:ra	d1," J.ЕМВО.,				
PR	C41	Savitsky, et al., "A single Ataxia Telangiecta Kinase," Science, 268:1749-1753 (1995)	asia Gene with a Product Si	milar to P1-3				
PR	C42	Seaton, et al., "Isolation and characterization involved in the DNA damage and DNA synt						
	C43	Schu, et al., "Phosphatidylinositol 3-Kinase" Protein Sorting," Science, 260:88-91 (1993)	Encoded by Yeast VPS34 C	Dene Essential for				
PR	Sheldrick, et al., "Feedback Controls and G2 Checkpoints: Fission Yeast as a Model System," BioEssays, 15:755-782 (1993)							
	<u> </u>							

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PR	C45	Sumitomo Chem. Co. (Q47789), Genbank Sequence Database, National Center for Biotechnology Information, National Library of Medicin, Bethesda, Maryland, publicly available March 2, 1994.
PR	C46	Walworth, et al., "Fission yeast chk! protein kinase links that rad checkpoint pathway to cdc2," Nature, 363:368-371 (1993)
PR	C47	Weinert, et al., "Mitotic checkpoint genes in budding yeast and the dependence of mitosis on DNA replication and repair," Genes Dev. 8:652-665 (1994)
PR	C48	Weinert, et al., "The RAD9 Gene Controls the Cell Cycle Response to DNA Damage in Saccharomyces cerevisiae, Science, 241:317-322 (1988)

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